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PATENT

#22

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Michael J. Sullivan  
For : IMPROVED MULTI-LAYER GOLF BALL  
Serial No. : 08/926,246  
Filed : September 5, 1997  
Group Art Unit : 3711  
Examiner : M. Graham  
Last Office Action : July 17, 2000  
Attorney Docket No. : P-3724-F1-C1  
SLD 2 0035-1-2-2

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Cleveland, Ohio 44114-2518  
February 6, 2001

**COMMUNICATION AND TRANSMITTAL OF  
RULE 37 C.F.R. § 1.192 APPELLANT'S BRIEF**

Assistant Commissioner for Patents  
Washington, DC 20231  
**BOX AF**

Dear Sir:

Enclosed are three copies of a RULE 37 C.F.R. § 1.192 APPELLANT'S BRIEF for filing in the above-captioned case. A check in the total amount of \$310.00 is enclosed.

The Commissioner is authorized to charge any additional fees, or refund any overpayment to Deposit Account No. 06-0308.

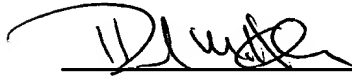
**CERTIFICATE OF MAILING**

I hereby certify that this **COMMUNICATION AND TRANSMITTAL OF RULE 37 C.F.R. § 1.192 APPELLANT'S BRIEF** is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 2/7/01

By: Mary Ann Temesvari  
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Respectfully Submitted,

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Cleveland, Ohio 44114-2518  
February 6, 2001

**APPEAL BRIEF UNDER 37 C.F.R. 1.192**

Attention: Board of Patent Appeals and Interferences  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This is in furtherance of the Notice of Appeal that was filed in this case on December 8, 2000.

The fees required under §1.17, and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying Transmittal of Appeal Brief.

Appellant files herewith an Appeal Brief in connection with the above-identified application, wherein claims 1-8 were finally rejected in the Office Action of July 17, 2000. What follows is Appellant's Appeal Brief (submitted in triplicate) in accordance with 37 C.F.R. §1.192(a):

**I. REAL PARTY INTEREST (37 C.F.R. §1.192(c)(1))**

The real parties at interest in this appeal are the inventor named in the

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caption of this brief (Michael J. Sullivan) and his assignee, Spalding Sports Worldwide, Inc. (formerly Lisco, Inc.).

**II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. §1.192(c)(2))**

Currently, it is believed that there are no other appeals or interferences in process or pending before the U.S. Patent and Trademark Office which the present application bases its priority from, or any case which bases its priority upon the present application, that will directly affect, or will be directly affected by, or will have a bearing on the Board's decision in this appeal.

Appellant notes that U.S. Application Serial Nos. 08/815,556, filed March 12, 1997; 09/121,628, filed July 23, 1998; and 08/998,243, filed December 24, 1997 are currently under appeal before the U.S. Patent and Trademark Office. Also, a Notice of Appeal has been filed for the U.S. Application Serial Nos. 08/870,585, filed June 6, 1997; and 08/926,194, filed September 9, 1997. The above-mentioned applications claim priority from one or more of the cases upon which the present application claims priority. Although the present application is not directly related to the above-mentioned applications, Appellant cites those cases in order to bring them to the Board's attention.

**III. STATUS OF CLAIMS (37 C.F.R. §1.192(c)(3))**

The status of the claims set forth after the Final Office Action mailed July 17, 2000 was, and is, as follows:

Allowed claims: **none**

Rejected claims: **1-8**

The present appeal is directed specifically to claims **1-8**.

**IV. STATUS OF THE AMENDMENTS (37 C.F.R. §1.192(c)(4))**

In the final Office Action of July 17, 2000, the Examiner rejected claims **1-8** under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art, that the inventor, at the time the application was filed, had possession of the claimed invention.

**V. SUMMARY OF THE INVENTION (37 C.F.R. §1.192(c)(5))**

The present invention is directed to three piece solid golf balls having a center core (page 10, line 17), an intermediate layer (page 10, lines 18-19; page 42, lines 15-19), and a cover layer enclosing the core and the intermediate layer (page 10, line 19; page 43, lines 23-24). The center core has a diameter of at least 29 mm (1.1417 inches) (page 35, lines 12-14) and a specific gravity of less than 1.4 (page 39, lines 10-12).

The intermediate layer has a thickness of at least 1 mm (0.03937 inches) (page 36, lines 5-7), a specific gravity of less than 1.2 (Sample E of Table 7 on pages 41-42), and a hardness of at least 85 on JIS C (Shore C) scale (page 42, line 7). The specific gravity of the intermediate layer is less than the specific gravity of the core.

The cover layer has a thickness of 1 to 3 mm (0.03937 to 0.1182 inches) (p. 36, lines 7-9) and is softer than the intermediate layer.

Accordingly, the present invention is directed to a multi-layered golf ball comprising a core, a hard intermediate layer and a soft outer cover layer. The multi-layered ball provides for enhanced distance without sacrificing playability or durability. The combination of the inner and outer cover layers provides a golf ball exhibiting enhanced resilience and durability while maintaining and/or improving the playability properties.

**VI. ISSUES (37 C.F.R. §1.192 (c)(6))**

Whether claims 1-8 contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

**VII. GROUPING OF CLAIMS (37 C.F.R. §1.192 (c)(7))**

No two or more claims at issue, i.e, claims 1-8, stand or fall together. That is, each claim recites separately patentable subject matter. This is explained in detail below.

**VIII. ARGUMENTS (37 C.F.R. §1.192 (c)(8))**

**The Examiner's Rejection of Claims 1-8 Under 35 U.S.C. 112, First Paragraph, As Containing Subject Matter Which Was Not Described in the Specification In Such a Way As To Reasonably Convey to One Skilled in the Relevant Art That The Inventor, At the Time the Application Was Filed, Had Possession of the Claimed Invention Is Erroneous and Must Be Reversed.**

The Examiner rejected claims 1-8 under 35 U.S.C. 112, first paragraph, for allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Specifically, the Examiner asserted:

Each of the following has been identified by the examiner as new matter:

1. In claim 1, the lower limit on the core diameter (29 mm), the upper limit on the core specific gravity (1.4), the limit on the intermediate layer thickness (at least 1 mm), the upper limit of the specific gravity of the intermediate layer (1.2), the lower limit of the hardness of the intermediate layer (85 on JIS C), and the upper limit of the thickness range of the cover being claimed (3 mm) was not disclosed in the originally filed specification.

\* \* \*

2. In claim 3, there is no basis provided for the applicant's reasoning that the new claimed hardness range of the cores and covers was inherent in the original specification. Without a basis in the original specification the now claimed ranges must be considered new matter.

3. In claim 5, the lower limit of the diameter of the center core being claimed (29 mm) was not disclosed in the originally filed specification. The lower limit originally disclosed was 35.052 mm.

4. In claim 6, neither the upper or lower limit of the claimed difference in the specific gravity (.5-.1) was disclosed in the originally filed specification. By applicant's admission the limits of the difference disclosed were (.234-.164).

5. In claim 7, neither the upper limit (1.0) nor the lower limit (.9) were disclosed in the originally filed specification. While values within the range were disclosed they do not make inherent the upper and lower bounds of the claimed range.

6. In claim 8, neither the upper limit (100) nor the lower limit (85) were disclosed in the originally filed specification. While values within that range were disclosed they do not make inherent the upper and lower bounds of the claimed range.

See Final Office Action July 17, 2000, pages 2-3.

Appellant notes that the Examiner first presented the rejection, and above

arguments, under 35 U.S.C. 112, first paragraph, in an Office Action mailed December 13, 1999. **The rejection was first presented in the December 13, 1999, Office Action in spite of the U.S. Patent Office permitting the exact claims at issue, i.e., claims 1-8, to go through protracted examination and prosecution for over two years without raising any issues under 35 U.S.C. 112, first paragraph.**

### **The Claimed Subject Matter**

Claims 1-8 relate to a three piece solid golf ball comprising a center core, an intermediate layer, and a cover enclosing the core through the intermediate layer. The core has a diameter of at least 29 mm (1.1417 inches). The core also has a specific gravity of less than 1.4. The intermediate layer has a thickness of at least 1 mm (0.03937 inches). The intermediate layer has a specific gravity of less than 1.2 and a hardness of at least 85 on the JIS C (Shore C) scale. The specific gravity of the intermediate layer is lower than the specific gravity of the core. The cover has a thickness of 1 to 3 mm (0.03937 to 0.1182 inches). The cover is softer than the intermediate layer.

Claim 2 requires that the intermediate layer is formed of a high repulsion ionomer resin base composition.

Claim 3 requires that the center core has a hardness of 45 to 80 on the JIS C scale. Claim 3 further requires that the cover has a hardness of 50 to 85 on the JIS C scale.

Claim 4 recites that the core is comprised of a polybutadiene base rubber composition.

Claim 5 calls for the inner diameter of the center core to be in the range of 29-37 mm.

Claim 6 requires that the difference in the specific gravity between the center core and the intermediate layer is in the range of 0.1 to 0.5.

Claim 7 recites that the specific gravity of the intermediate layer is in the range of 0.9 to 1.0.

Finally, claim 8 requires that the hardness of the intermediate layer is in the range of 85-100 on the JIS C scale.

**The Subject Matter of Claims 1-8 Are Based Upon and Supported By the  
Disclosure As Originally Filed**

The Examiner rejected claims 1-8 under 35 U.S.C. § 112, first paragraph as containing subject matter which purportedly was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor at the time the application was filed had possession of the claimed invention.

The present specification discloses the features recited in claims 1-8. Even though the specification does not provide an *ipsis verbis* disclosure, an "[i]psis verbis disclosure is not necessary to satisfy the written description requirement of §112. Instead, the disclosure need only *reasonably convey* to persons skilled in the art the inventor had possession of the subject matter in question." *Fujikawa v. Wattanasin*, 93 F.3d 1559, 39 USPQ2d 1895 (Fed. Cir. 1996) (emphasis provided). The proper test for claim support under 35 U.S.C. § 112, first paragraph, is whether the disclosure, as originally filed, *reasonably conveys* to one skilled in the art that the inventor had possession of the claimed subject matter, rather than the presence or absence of literal support. *Ralston Purina Co. v. Far-Mar-Co., Inc.*, 772 F.2d 1570 (Fed. Cir. 1985). If the essence of the original disclosure supports the new claim limitation, the new claimed feature is not new matter. *In re Wright*, 866 F.2d 422 (Fed. Cir. 1989).<sup>1</sup>

Furthermore, the U.S. Patent and Trademark Office bears the initial burden of presenting a *prima facie* case of unpatentability. Specifically, the Patent and Trademark Office bears the burden of showing that the invention recited by the claims is not described in the specification. *In re Wertheim*, 541 F.2d 257, 265 (CCPA 1976). Arguing that the specification lacks literal support for the claims is not sufficient. *Id.* The Patent Office must "give reasons why a description not *in ipsi verbis* is insufficient." *Id.* Insofar as the written requirement is concerned, that burden is only discharged by presenting evidence or reasons why persons skilled in the art would *not recognize* in the specification a description of the invention defined by the claims.

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<sup>1</sup>Although the claims at issue were originally copied from U.S. Patent No. 5,553,852 in order to provoke an interference with that patent, the Board will appreciate that the standard for §112 does not change. The Federal Circuit has held that the description requirement under 35 U.S.C. §112, paragraph 1 is the same for a claim copied for interference purposes as for a claim presented during ex parte prosecution. *In re Spina*, 24 USPQ2d 1142 (Fed. Cir. 1992). See also *In re Smith*, 481 F.2d 910, 914 (CCPA 1973) ("The description requirement of 35 USC 112 is the same for a claim copied for purposes of instituting an interference as for a claim presented during ex parte prosecution of a patent application.").



The Examiner failed to meet a *prima facie* case for unpatentability since the support for the claims can be found in the present specification. The Examiner's assertion that the specification does not disclose each and every range cited in the present claims does not, by itself, adequately support a rejection under 35 U.S.C. § 112, first paragraph. Instead, the standard under 35 U.S.C. § 112, first paragraph, is whether the specification reasonably conveys to one skilled in the art that the inventor had possession of the claimed invention.

**A. Claim 1**

The Examiner rejected claim 1 and argued that it recites subject matter not sufficiently disclosed in the specification. Each feature argued by the Examiner as "new matter" can be found within the specification of the present application.

**1. Core Diameter of At Least 29 mm Or More**

First, the claimed feature of the center core having a diameter of at least 29 mm can be found on page 35, lines 12-14, where the *preferred* core has a diameter of about 1.545 inches (i.e., 39.243 mm). Furthermore, a range of about 1.495 to about 1.575 inches (37.97 to 40.01 mm) is also disclosed at the noted page. Appellant respectfully submits that the specification does not have to explicitly disclose each and every core diameter in the claimed range so long as the claimed core diameter range is reasonably conveyed to one skilled in the art.<sup>2</sup>

**2. Core Having a Specific Gravity of 1.4 Or Less**

Second, the specific gravity of the core of less than 1.4 can be found in the example on page 39, which shows the diameter of the core to be 1.545 inches (39.243 mm) and the weight of the core to be 36.5 grams. This weight and diameter results in a specific gravity of 1.154 (i.e., 36.5 grams/31.642 cm<sup>3</sup>). Thus, the present specification discloses values within the claimed range. The specification is not required to explicitly disclose each and every specific gravity in the claimed range so long as the specific gravity of the core is reasonably conveyed to one skilled in the art.

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<sup>2</sup>A specification does not have to disclose the exact same range recited in the claim in order to adequately disclose a range recited in a claim. *Ralston Purina*, 772 F2d 1570 (Fed. Cir. 1985).

### 3. Intermediate Layer Thickness of At Least 1 mm

Support for the intermediate layer having a thickness of at least 1 mm can be found on page 36, lines 5-6 of the present application, where the intermediate or inner cover layer is about 0.100 inches (2.54 mm) to about 0.010 inches (0.254 mm). In the examples, an intermediate or inner cover layer is disclosed having a thickness of 1.7 mm (page 39, line 12).

The Examiner acknowledged that the lower limit of the intermediate thickness, i.e., 1 mm, was part of Appellant's original disclosure (Final Office Action, July 17, 2000, page 5). The Examiner, however, contended:

[A]pplicant's disclosed ball is not inclusive of thicknesses above 2.54 mm whereas that being claimed is.

Final Office Action, July 17, 2000, page 5. ✓

Appellant notes that U.S. Patent 5,553,852 to *Higuchi et al.* (Exhibit A), from which the claims of the present application are derived, also claims an intermediate layer having a thickness of at least 1 mm but is not inclusive of thicknesses above a particular threshold. Specifically, the '852 patent discloses at col. 3, lines 29-30, that the intermediate layer thickness is preferably 1.5 to 3.5 mm. Following the Examiner's logic with respect to the claims at issue, the '852 patent specification is not inclusive of thicknesses above 3.5 mm, but yet that patent claims thicknesses that are inclusive of thicknesses greater than 3.5 mm (claiming a thickness of at least 1 mm). The claims of the '852 patent, however, were still allowed. **It appears that the Office is applying a different standard.**

In view of the foregoing, Appellant respectfully submits that the present specification reasonably conveys to one skilled in the art the claimed intermediate layer thickness.

### 4. Intermediate Layer Having a Specific Gravity of Less Than 1.2

The Examiner contended that the upper limit of the specific gravity of the intermediate layer was not disclosed in the originally filed application. Specifically, the Examiner stated:

[T]he originally filed disclosure is not inclusive of the range between 1.2 and 0.97 as is now being claimed. Applicant's exhibit A does not address any specific gravities between 1.2 and .99.

Final Office Action, July 17, 2000, page 5.<sup>3</sup>

Appellant respectfully submits that support for the intermediate layer having a specific gravity of less than 1.2 can be found in Sample E of Table 7 on pages 41-42. Sample E is a 50/50 blend of Iotek® 7030 and Iotek® 8000 which have specific gravities of 0.96 and 0.954, respectively (see pp. 28 and 29). Similarly, while the data on Iotek® 959 and Iotek® 960 shown on page 15 does not specifically list the specific gravity, Exhibit B, attached herewith, shows the specific gravities of ionomers as being 0.920 to 0.990, which is less than the specific gravity of 1.2 as recited in claim 1. Furthermore, the specific gravity of the intermediate or inner cover layer (i.e., 0.920 to 0.990) is lower than the specific gravity of the core.

Appellant respectfully submits that the specification does not have to disclose each and every specific gravity in the claimed range so long as the claimed specific gravity is reasonably conveyed to one skilled in the art. The Examiner merely contends that there is lack of literal support for the recited range, which, as previously described herein, is not sufficient to show that the specification does not disclose the claimed invention.

Appellant further notes that the '852 patent (Exhibit A), although stating an upper limit of 1.2 for an intermediate layer, fails to show or demonstrate an intermediate layer having a specific gravity of greater than 0.95. Specifically, the intermediate layers of Examples 1-6 in Table 2 of the '852 patent (col. 5-6) have specific gravities of 0.95. By the Examiner's arguments, the '852 patent would fail to address specific gravities between 1.2 and 0.95. The '852 patent fails to show, in examples or otherwise, intermediate layers exhibiting every specific gravity between 1.2 and 0.95. The claims of the '852 patent, however, were still allowed. Similarly, Appellant submits that the specific gravities of the intermediate layer found in Sample E of Table 7 on pages 41-42 and in Exhibit 1 attached herewith are less than the recited specific gravity of 1.2 and, although not demonstrative of every specific gravity between 0.99 and 1.2, convey to a person skilled in the art that the claimed specific gravity of the intermediate layer is less than 1.2.

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<sup>3</sup>The "exhibit A" referred to by the Examiner was a graph of the density of Iotek ionomers versus acrylic acid content. That graph was submitted in a Response by Applicant on May 4, 2000. That same graph is attached herewith as Exhibit B.

Thus, even though the specification does not describe the specific gravity of the intermediate layer in *ipsis verbis*, the present specification reasonably conveys to one skilled in the art the claimed specific gravities for the intermediate layer are less than 1.2.

#### **5. Intermediate Layer Hardness of At Least 85 Shore C**

With regard to the hardness of the intermediate layer, the Examiner contended that the originally filed disclosure is not inclusive of hardness values between 85 and 95. (Final Office Action, July 17, 2000, page 5).

Appellant respectfully submits that support for the intermediate layer having a hardness of at least 85 on a JIS C (Shore C) scale can be found on page 42, line 7, which shows a Shore C hardness of 96. Also, on page 42, line 7, a 50/50 blend of Iotek 959/960 has a Shore C hardness of 98.

Appellant further submits that, even though the Shore C hardness is not exactly described in *ipsis verbis*, the specification reasonably conveys to one skilled in the art an intermediate layer having a hardness of at least 85 on a JIS C (Shore C), as set forth in claim 1. The sole basis for the Examiner's argument is that the description does not recite the claimed ranges in *ipsis verbis*, which is not sufficient to show that the specification does not describe that which Appellant claims as the invention.

#### **6. Cover Thickness of 1-3 mm**

The cover having a thickness of 1 to 3 mm is disclosed on page 36, lines 7-8, where the outer cover is 0.254 to 1.27 mm. Although the specification does not explicitly disclose the claimed cover thickness, the present specification reasonably conveys to one skilled in the art the claimed cover thickness.

For at least these reasons, claim 1 is proper and does not introduce any new matter in the present application.

#### **B. Claim 3**

The Examiner rejected claim 3 under 35 U.S.C. § 112, first paragraph, as containing new subject matter that was not described in the specification.

Regarding the cover having a hardness of 50 to 85 on the JIS C scale, the

present specification discloses various ionomers that form the cover within the claimed JIS C range. Although the present specification does not explicitly disclose JIS C ranges for the cover, the present specification does disclose Shore D hardness values for particular ionomers that can be used to form the cover. Exhibit C, attached herewith, shows a durometer scale comparison chart between Shore D and Shore C scales.<sup>4</sup> Although the chart is not used for conversion purposes, the chart does give one skilled in the art a reasonable basis for determining whether the ionomers disclosed in the present specification for the cover fall within the JIS C range recited in claim 3.

Page 15, line 15, discloses that the Iotek<sup>®</sup> 960 ionomer has a Shore D hardness of 57. Table 1 on page 18 discloses that the various Primacor<sup>®</sup> ionomers have a Shore D hardness between 40 and 50. Table 3 on page 27 discloses that Surlyn<sup>®</sup> 8528 has a Shore D hardness of 60. Table 4 on page 28 discloses that Iotek<sup>®</sup> 4000 and Iotek<sup>®</sup> 4010 have a Shore D of 55; Iotek<sup>®</sup> 8020 has a Shore D of 58; and Iotek<sup>®</sup> 8030 has a Shore D of 59. Finally, Table 4 on page 29 discloses that Iotek<sup>®</sup> 7010 has a Shore D of 57; Iotek<sup>®</sup> 7020 has a Shore D of 55; and Iotek<sup>®</sup> 7030 has a Shore D of 55. Based upon the comparison chart in Exhibit 2, it would be clear to one skilled in the art that the present specification discloses ionomers that may be used to form the cover that have a hardness in the claimed range.

Therefore, it is clear from the specification that it reasonably conveys to one skilled in the art the recited JIS C range of 50-85 for the cover.

With regard to the claimed features of a center core having a hardness of 45 to 80 on the JIS C scale, Appellant respectfully submits that such range is inherent from the specification. The written description requirement is satisfied when the disclosed subject matter, given its "necessary and only reasonable construction," inherently satisfies the limitation in question. *Behr v. Talbot*, 27 USPQ2d 1401, 1407. Clearly, one skilled in the art would recognize that all of the preferred materials that make up the core in the present application are within such a range.

For at least these reasons, claim 3 is proper and does not introduce new matter into the present specification.

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<sup>4</sup>Please note that Shore C values are identical to JIS C values.

**C. Claim 5**

The Examiner rejected claim 5 under 35 U.S.C. § 112, first paragraph, as containing new subject matter which allegedly was not disclosed in the specification of the present application.

The diameter of the center core in the range of 29 to 37 mm is found in the specification when the maximum intermediate or inner cover layer and outer cover thickness are used so that the core of a 1.68 inch ball is 1.38 inches (i.e., 35.052 mm). Appellant duly notes that such a core diameter is preferred. However, it would be clear to one skilled in the art that the core diameter may change depending on the diameter of the ball. The present specification reasonably conveys to one skilled in the art that Appellant had possession of the claimed subject matter of the center core diameter having a range of 29 to 37 mm. Thus, claim 5 is proper and does not introduce new matter into the present specification.

**D. Claim 6**

The Examiner rejected claim 6 as introducing new matter not present in the original disclosure. Specifically, the Examiner contended:

In claim 6, neither the upper or lower limit of the claimed difference in specific gravity (.5 - .1) was disclosed in the originally filed specification. By Applicant's admission the limits of the difference disclosed were (.234 - .164).

Final Office Action, July 17, 2000, page 3.

The Examiner further stated:

Regarding claim 6, applicant has still provided no evidence that values above .234 or below .164 were intended as is now claimed.

Final Office Action, July 17, 2000, page 5.

Appellant respectfully submits that Appellant's Response from May 4, 2000 is not an admission that limits the difference in specific gravity to the range of 0.234 to 0.164. Rather, the range of 0.234 to 0.164 listed in the May 4, 2000 Response provides evidence of differences in specific gravities that fall within the claimed range of 0.5 to 0.1. Appellant notes, as it previously did in the May 4, 2000 Response (See May 4, 2000 Response, page 5) and the After Final Response of November 17, 2000 (See November 17, 2000 After Final Response, page 5), that the difference (of 0.234 to 0.164) is *preferred* and clearly falls with the claimed range (of 0.5 to 0.1).

Appellant further submits that the specification reasonably conveys to one skilled in the art the claimed range for the difference in specific gravity. Consequently, claim 6 is proper and does not introduce new matter in the specification.

**E. Claim 7**

The Examiner rejected claim 7, which recites the range for the specific gravity of the intermediate layer as 0.9 to 1.0, under 35 U.S.C. § 112, paragraph one. Specifically, the Examiner stated:

[A]pplicant has still provided no evidence that values as high as the upper end of the claimed ranges, or as low as the lower end of the claimed ranges were intended as is now claimed. Thus, values such as these represent new matter. The values now being claimed are only one possibility among an infinite number that Appellant might have intended.

Final Office Action, July 17, 2000, pages 5-6.

Appellant submits that support for the specific gravity of the intermediate layer can be found in Sample E of Table 7, where a 50/50 blend of Iotek® 7030/8000 have specific gravities of 0.96 and 0.954, respectively (see pp. 28 and 29), which are within the parameters of claim 7. The above values are preferred values and as such, the claimed range is broader to also include less preferable ranges. Additionally, while the data on Iotek® 959 and Iotek® 960 shown on page 15 does not specifically list the specific gravity, Exhibit B, attached herewith, shows the specific gravities of ionomers as being 0.920 to 0.990, which is clearly within the range of 0.9 and 1.0 set forth in claim 7.

Appellant, therefore, respectfully submits that the present specification reasonably conveys to one skilled in the art that Appellant had possession of the claimed specific gravity in the range of 0.9 to 1.0. Thus, claim 7 is proper and does not introduce new matter in the present specification.

**F. Claim 8**

The Examiner rejected claim 8 under 35 U.S.C. § 112, paragraph one, stating that: "neither the upper limit (100) nor the lower limit (85) [of the hardness of the intermediate layer] were disclosed . . . ." Additionally, the Examiner stated (referring to both claims 7 and 8):

[A]pplicant has still provided no evidence that values as high as the

upper end of the claimed ranges, or as low as the lower end of the claimed ranges were intended as is now claimed. Thus, values such as these represent new matter. The values now being claimed are only one possibility among an infinite number that Appellant might have intended.

Final Office Action, July 17, 2000, pages 5-6.

Appellant respectfully submits that support for the hardness of the intermediate layer can be found in Table 7, pages 41-42, wherein the intermediate cover preferably has a Shore C hardness of 96 to 98, which clearly falls within the claimed range of 85 to 100. Again, although the specification does not describe the invention of claim 8 in *ipsis verbis*, the present specification reasonably conveys to one skilled in the art the claimed range. Thus, claim 8 is proper and does not introduce new matter in the present specification.

Appellant believes that, based upon the disclosure as originally filed, the claims of the present application, as copied from *Higuchi* (U.S. Patent No. 5,553,852) find support therein, either explicitly or inherently. As such, the rejection under 35 U.S.C. § 112, first paragraph, is improper and withdrawal of the rejection is respectfully requested.

#### **CONCLUSION**

In view of the foregoing, Appellant submits that the specification provides sufficient support for each of the elements recited in claims 1-8. Accordingly, it is respectfully requested that the Examiner's rejection be reversed.



Respectfully submitted,  
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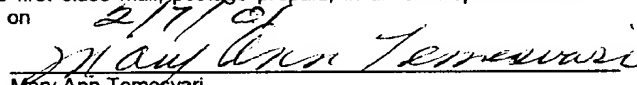
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**CERTIFICATE OF MAILING**

I hereby certify that this **APPEAL BRIEF UNDER 37 C.F.R. 1.192** in connection with U.S. Patent Application Serial No. 08/926,246 is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on 2/17/01

By:

  
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**IX. APPENDIX OF CLAIMS (37 C.F.R. §1.192 (c)(a))**

1. A three piece solid golf ball comprising:  
a center core, an intermediate layer, and a cover enclosing the core through the intermediate layer;  
5                   said center core having a diameter of at least 29 mm (1.1417 inches) and a specific gravity of less than 1.4;  
                    said intermediate layer having a thickness of at least 1 mm (0.03937 inches), a specific gravity of less than 1.2, and a hardness of at least 85 on JIS C (Shore C) scale, the specific gravity of said intermediate layer being  
10                   lower than the specific gravity of said center core; and  
                    said cover having a thickness of 1 to 3 mm (0.03937 to 0.1182 inches) and being softer than said intermediate layer.
2. The golf ball of claim 1 wherein said intermediate layer is formed of a high repulsion ionomer resin base composition.
3. The golf ball of claim 1 wherein said center core has a hardness of 45 to 80 on JIS C scale and said cover has a hardness of 50 to 85 on JIS C scale.
4. The golf ball of claim 1 wherein said center core is comprised of a polybutadiene base rubber composition.

5. The golf ball of claim 1 wherein the diameter of said center core is in the range of 29-37 mm.

6. The golf ball of claim 1 wherein a difference in the specific gravity between the center core and the intermediate layer is in the range of 0.1 to 0.5.

7. The golf ball of claim 1 wherein the specific gravity of said intermediate layer is in the range of 0.9 to 1.0.

8. The golf ball of claim 1 wherein the hardness of said intermediate layer is in the range of 85-100 on JIS C.